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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,304	05/16/2006	Gerrit Jan Scholl	NL 031359	2983
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EXAMINER				
KROFCHECK, MICHAEL C				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,304

Applicant(s)

SCHOLL ET AL.

Examiner

MICHAEL C. KROFCHECK

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 16 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to application 10/579,304 filed on 5/16/2006.
2. The preliminary amendment filed on 5/16/2006 has been entered.
3. Claims 6, 8, 10, 17, 19, 21, and 23-24 have been amended.
4. Claims 1-24 have been examined.

Priority

5. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)),

and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

Drawings

6. The drawings are objected to because Figures 2 and 7 is indicated as showing the device and the method of the invention, but it is extremely difficult to follow as the components of the device and the steps in the flowchart of the method are not labeled in the figures. Text describing each step/component should be within each box of the flowchart. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

8. Claims 7, 9, 18, and 20-22 are objected to because of the following informalities:
- a. With respect to claims 7 and 18, the limitations, "the first file system partition" and "the second file system partition" in each claim do not have sufficient antecedent basis in the claims.
 - b. With respect to claims 9 and 20, the limitation, "the second file system partition" in each claim does not have sufficient antecedent basis in the claims.
 - c. With respect to claim 21, the limitation, "the initialization step" does not have sufficient antecedent basis in the claims.
- Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Regarding claims 1 and 12 specifically, each claim indicates, "record only one set of file entries...in case of positive result of the verification." It is unclear what a "positive result of the verification," actually is since the claims do not specifically set forth the constraints of such a condition. The claims identify that the verification includes checking address reference formats and reference points for the two file system, but does not correlate a result from that and a positive verification. This renders the claim indefinite because it is unclear of the metes and bounds of the claims.

12. Regarding claims 2 and 13, the claims also include performing an action based on "positive result of the verification" without indicating what result of the verification is "positive" comparable to claims 1 and 12 indicated previously.

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claim 24 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

15. Claim 24 is directed towards, "[a] computer program product for recording digital information signals...which program is operative to cause a processor to perform the method..." As written in the claim, the program is not embodied or stored within a statutory computer readable medium. Thus the claim is merely directed to a software program *per se*, and abstract idea, and does not positively claim any structural or functional interconnection with the software that would in and of itself enable any usefulness of the software to be realized.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. Claims 1-7, 10-18, 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tol et al. (US 2002/0159369), Azumatani et al. (US 5,475,688), Wong et al. (US 5,890,169), and Rotter et al. (US 2003/0046280).

20. With respect to claims 1, 12, and 23 Tol teaches of a computer data system comprising a computer connected to a device for recording digital information signals in addressable locations on a removable rewritable disc like recording medium, the digital information signals representing user data, first file system data and second file system data (figs. 3, 5; abstract, paragraph 11-12),

each file system data comprising a corresponding set of file entries (paragraph 14, 45),

the device comprising recording means for recording the digital information signals on the medium (fig. 5, item 19; paragraph 44-45);

input means connected to the computer for receiving the digital information signals (fig. 5, items 22-24; paragraph 44-45),

reading means for reading recorded digital information signals recorded on the medium (fig. 5, item 19; paragraph 44-45); and

output means for outputting the read digital information signals to the computer (fig. 5, items 22-24; paragraph 44-45),

control means for controlling recording the digital information signals (fig. 5, items 23-24; paragraph 45).

Tol fails to explicitly teach of the file entries comprising address references pointing to the user data according to a predefined format and defined relative to a reference point, and characterized in that the control means are adapted to perform a verification in order to check whether the first file system address references format is the same as the second file system address references format and whether the first file system reference point is the same as the second file system reference point, and to record only one set of the file entries shared by both file systems data in case of positive result of the verification.

However, Azumatani teaches of the file entries comprising address references pointing to the user data according to a predefined format and defined relative to a reference point (figs. 8-9; column 5, line 60-column 7, line 18).

The combination of Tol and Azumatani does not explicitly teach of characterized in that the control means are adapted to perform a verification in order to check whether the first file system address references format is the same as the second file system address references format and whether the first file system reference point is the same as the second file system reference point, and to record only one set of the file entries shared by both file systems data in case of positive result of the verification.

However, Wong teaches of multiple operating systems that use the FAT file systems (column 2, lines 35-43).

Rotter teaches of identifying and consolidating duplicate information (paragraphs 6-7, 13).

The combination of Tol, Azumatani, Wong, and Rotter teaches of characterized in that the control means are adapted to perform a verification in order to check whether the first file system address references format is the same as the second file system address references format and whether the first file system reference point is the same as the second file system reference point, and to record only one set of the file entries shared by both file systems data in case of positive result of the verification (Rotter, paragraph 6-7, 13; in the combination it is the file management information of Azumatani for Azumatani and Wong's operating systems that is consolidated if they are the same).

It would have been obvious to one of ordinary skill in the art having the teachings of Tol and Azumatani at the time of the invention to include the file management information for the operating systems of Azumatani in Tol. Their motivation would have been to allow for a plurality of operating systems to have access to the stored data (Azumatani, column 2, lines 37-47).

It would have been obvious to one of ordinary skill in the art having the teachings of Tol, Azumatani, and Wong at the time of the invention to include the recited FAT operating systems of Wong in the combination of Tol and Azumatani in order to

increase the number of operating systems that are able to access the stored data (Azumatani, column 2, lines 37-47).

It would have been obvious to one of ordinary skill in the art having the teachings of Tol, Azumatani, Wong, and Rotter at the time of the invention to include the consolidation of duplicate information as taught in Rotter in the combination of Tol, Azumatani, and Wong in order to more efficiently use the available storage space.

21. With respect to claims 2 and 13, Azumatani teaches of each file system data comprising a corresponding set of directory entries and a corresponding file set descriptor (fig. 9; column 6, lines 38-43),

the directory entries comprising address references pointing to the file entries according to the predefined format and defined relative to the reference point (fig. 9; column 45-column 7, line 10),

the file set descriptor comprising information related to the set of directory entries and the set of file entries (fig. 9; column 45-column 7, line 10).

The combination of Tol, Azumatani, Wong, and Rotter teaches of the device characterized in that the control means are adapted to perform the verification comprising checking whether both file systems data share one file set descriptor, and to record only one set of the directory entries shared by both file systems data in case of positive result of the verification (Rotter, paragraph 6-7, 13; in the combination it is the file management information of Azumatani for Azumatani and Wong's operating systems that is consolidated if they are the same, thus having one set of directory entries).

22. With respect to claims 3 and 14, the combination of Tol, Azumatani, Wong, and Rotter teaches of the limitations cited above with respect to claims 1 and 12.

23. With respect to claims 4 and 15, the combination of Tol, Azumatani, Wong, and Rotter teaches of characterized in that the control means are adapted to check a bit flag comprising information related to both file system address references formats and both file system reference points (Rotter, paragraphs 6-7, 13; where in comparing the records from Rotter, the file management information (bit flag) of Azumatani is checked. In Tol, it is the data structures in the administrative area (fig. 4). The application does not provide for a definition of "bit flag" in the specification or claim language, thus the file management information (Azumatani) or the data structures in the administrative area (Tol) constitutes a bit flag).

24. With respect to claims 5 and 16, the combination of Tol, Azumatani, Wong, and Rotter teaches of characterized in that the control means are adapted to check a bit flag comprising information related to the one file set descriptor (Rotter, paragraphs 6-7, 13; where in comparing the records from Rotter, the file management information (bit flag) of Azumatani is checked. In Tol, it is the data structures in the administrative area (fig. 4). The application does not provide for a definition of "bit flag" in the specification or claim language, thus the file management information (Azumatani) or the data structures in the administrative area (Tol) constitutes a bit flag).

25. With respect to claims 6 and 17, the combination of Tol, Azumatani, Wong, and Rotter teaches of characterized in that the control means are adapted to read the bit

flag from the medium (Azumatani; fig. 5; since the file management information is stored on the disk, it must be read from the disk).

26. With respect to claims 7 and 18, the combination of Tol, Azumatani, Wong, and Rotter teaches of characterized in that the control means are adapted to perform an initialization comprising defining file system partitions on the medium such that the first file system partition and the second file system partition start at the same point being the first file system reference point and the second file system reference point, and such that the first file system address references format is the same as the second file system address references format (Azumatani, fig. 9; column 6, lines 30-column 7, line 55; since it is stored in the optical disk, it must have been initialized and written to the disk. In the combination, the operating systems of Wong are included and as they are also FAT system, the format is the same).

27. With respect to claims 10 and 21, the combination of Tol, Azumatani, Wong, and Rotter teaches of characterized in that the control means are adapted to set-up the bit flag (Tol, fig. 4; paragraph 36-38).

28. With respect to claims 11 and 22, the combination of Tol, Azumatani, Wong, and Rotter teaches of characterized in that the control means are adapted to record the bit flag on the medium (Tol, fig. 4; paragraph 36-38).

29. With respect to claim 24, Tol teaches of A computer program product for recording digital information signals in addressable locations on a removable rewritable disc like recording medium, which program is operative to cause a processor to perform

the above method (paragraph 44-46; as the device of Tol is a computer system, there must be a memory containing a program that control the operations of Tol's device).

30. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tol, Azumatani, Wong, and Rotter as applied to claims 2 and 13 respectively, and further in view of Ramsey (US 2005/0066117).

31. With respect to claims 8 and 19, the combination of Tol, Azumatani, Wong, and Rotter fails to explicitly teach of each file system data comprising a corresponding volume descriptor pointing to the file set descriptor. However, Ramsey teaches of each file system data comprising a corresponding volume descriptor pointing to the file set descriptor (fig. 3; paragraph 24),

The combination of Tol, Azumatani, Wong, Rotter, and Ramsey teaches of characterized in that the control means are adapted to record the first file system volume descriptor and the second file system volume descriptor, both pointing to the one file set descriptor shared by both file systems data (Tol, fig. 5; paragraph 44-46; as the microprocessor records the file systems' administrative area; it must be able to record the volume descriptor of each file system in the combination).

It would have been obvious to one of ordinary skill in the art having the teachings of Tol, Azumatani, Wong, Rotter, and Ramsey at the time of the invention to include the volume descriptor of the file system of Ramsey in each file system in the combination of Tol, Azumatani, Wong, and Rotter so that the file systems have access to the directory and file information (Ramsey, paragraph 24).

32. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tol, Azumatani, Wong, Rotter, and Ramsey as applied to claims 8 and 19 respectively, and further in view of Wu et al. (US 6,415,400).

33. With respect to claims 9 and 20, Tol teaches of the medium comprising a spare area outside the user area, characterized in that the control means are adapted to define the second file system partition comprising the spare area (figs. 1, 3; item 4, 13; paragraph 24, 30).

Tol fails to explicitly teach of the spare area outside the user area comprising replacement areas for defect management. However, Wu teaches of the spare area outside the user area comprising replacement areas for defect management (fig. 2; column 5, lines 51-62).

It would have been obvious to one of ordinary skill in the art having the teachings of Tol, Azumatani, Wong, Rotter, Ramsey, and Wu at the time of the invention to include the spare area of Wu in the combination of Tol, Azumatani, Wong, Rotter, Ramsey in order to efficiently manage the spare area and provide quick defect management (Wu, column 3, lines 25-46).

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Krofcheck whose telephone number is 571-272-8193. The examiner can normally be reached on Monday - Friday.
36. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
37. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/MICHAEL C KROFCHECK/
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